

## **Dependent Claims**

**4. The amount of biological enhancement in claim 1 will vary from organism to organism.**

**5. The amount of water enhancement in claim 1 will differentiate with using electromagnetic waves and a third party source of electromagnetic waves vice using two oscillators to create electromagnetic waves to create electromagnetic scalar waves induction in the water.**

**6. The amount of electromagnetic scalar wave induction in claim 2 will vary with the amount of voltage applied to the wiring that creates the electromagnetic wave field the angle of incidence of two electromagnetic wave fields to create the resultant electromagnetic scalar waves**

**7. a means to provide oscillation in claim 1 with an integrated circuit to provide electronic oscillation**

**8. a means to provide electromagnetic field induction in claim 3 with electromagnetic scalar waves with placement of wiring at angles of incidence wiring to be placed inside a tube containing the water to be enhanced and transported.**

8. A means to provide a single oscillator circuit in claim 1 to create electromagnetic fields along two external parallel wires connecting the oscillator tank circuit with placement of wiring at angles of incidence inside a vessel containing water to be enhanced
9. a means to provide electrical power and electronic oscillation with a integrated circuit to create electromagnetic scalar wave induction in claim 1.
10. a means to provide angles of incidence with two loops of wire the first wire which will encircle the inside of the vessel from top to bottom in a spiral fashion within the water vessel of water to be enhanced and the second wire loop to be looped from top to bottom in a sine wave or square wave fashion to create more electromagnetic scalar waves in claim 1.
11. a means to create a basket of wiring comprising two complete loops of wire configure in a fashion to create angles of incidence with electromagnetic fields to create electromagnetic scalar fields in claim 1.
12. a means to create increased vitality and color and smell in plants from the resultant enhanced water being absorbed by plants in claim 1.
13. a means to create increased hair fullness on head from thinning hairs and revitalization of hairs from balding areas from human enhancements in claim 1.
14. a means to reduce arthritic pain in human enhancements in claim 1.
15. a means to reduce dandruff on human enhancements in claim 1.

### **Abstract of the Disclosure**

**This invention is a new phenomena of the creation of enhanced water, with using electromagnetic scalar waves, upon drinking or absorption or assimilation of the enhance water, a enhanced biological functions occur as a result of drinking, absorption and assimilation of the enhanced water.**

### **Background of the invention**

**This invention relates to enhancement of water with active electromagnetic scalar waves, and the biological enhancement resulting from the absorption of the enhanced water to biological organism.**

### **Summary Of The Invention**

**It is an object of the invention to provide a new and unexpected biological result from the process of magnetizing water with electromagnetic and electromagnetic scalar waves.**

- 1. Object of the invention is to provide a method of enhancement of biological function for plant, animal, mammal and human consumption, absorption, and assimilation of magnetized water to support, restore, re-create and give life assistance to plant, animal, mammal and human body to repair, rejuvenate and sustain life.**
- 2. The invention comprises a method for treating water with scalar electromagnetic wave energy to create a magnetized water inside a vessel that supports water to be energized**

3. The invention uses scalar electromagnetic forces to create magnetic inductive nulls within the water vessel.
4. The inventions uses electromagnetic forces to create scalar waves within the support structure of vessel

The inventors best method of creating magnetized water is a power supply that uses appropriate source voltage 115vac united states standard or 220vac international standard to supply a dc voltage to the two oscillator circuits of the invention, an oscillator circuit that the tank circuit has wiring containing electromagnetic forces along a external wiring from the circuit board to the water within the water vessel, both electrical loops are opposed to each other with angles of incidence (two loop wiring cage) to induce electromagnetic scalar waves inside the water to be magnetized

### Detailed Description of the Drawings

Fig 1 num 1 is a power supply that takes provided external power and converts that power to a suitable electrical voltage to drive the oscillator Fig 1 num 4. Fig 1 num 5 and Fig 1 num 6 are the jumpers that provide power from the 1<sup>st</sup> circuit board to the 2<sup>nd</sup> oscillator circuit board that will create the electromagnetic induction along the insulated wiring. Fig 1 num 7 and fig 1 num 8 and fig 1 num 9 and fig 1 num 10, are the electrical loops to provide electromagnetic fields to create induction to the water provided in fig 1 num 12. Fig 1 7 and 8 are placed at a incidence angle with electrical loops fig 1 9 and 10 to induce electromagnetic scalar waves inside the provided vessel fig 1 num12. Fig 1 num 14 is the 2<sup>nd</sup> oscillator. Fig 1 number 4 is the 1<sup>st</sup> oscillator.

Fig 3 number 1 r1 and Fig 3 number 2 r2 are a voltage dividing resistor network to supply voltage to the oscillator circuitry. Fig 3 num 3 r3 is the emitter transistor resistor voltage to provide voltage to the emitter of the npn transistor. Fig 3 num 4 is the npn transistor that provides the change in voltage that will create the oscillator tank frequency. Fig 3 num 5 l1 is the electrical inductor that helps create the frequency tank circuit. Fig 3 num 6 w1 is the external wiring that is part of the electrical oscillator tank frequency that provides the electromagnetic induction with the water that is provided in the vessel that is shown as fig 1 num 12. Fig 3 num 7 c2 is a capacitor that helps create the oscillator tank frequency. Fig 3 num 8 c1 is a capacitor that helps create the oscillator tanks frequency. Fig 3 num 9 r4 is a resistor that helps create a voltage across the tank circuit to the electrically negative charged voltage provided from the power supply fig 1 num 1. Fig 3 num 10 is a means to provide positive voltage to the oscillator, Fig 3 num 11 is a means to provide negative voltage to the oscillator, fig 3 num 10 is a electrical conductive wiring that provides positive voltage from the power supply fig 1 num 1, fig 3 num 11 is a electrical conductive wiring that provides negative voltage from the power supply, figure 3 num 10 also has a non conductive electrical insulation that provides insulation across the electrical wiring, fig 3 number 10 also has a non conductive electrical insulation that provides insulation across the electrical wiring

Fig 3 num 6 w1 is the electrical conduction wiring that is surrounded with a non conducting electrical wiring. This external wire is part of the oscillator tank circuit comprising and l1, c1, c2, and this tank circuit provides the electromagnetic fields along the wiring fig 3 num 6 w1 to the vessel fig 1 num 12 that contains the water to be magnetized. The two electrical loops fig 1 number 7 and 8 plus fig 1 number 9 and 10 are shown with a angle of incidence fig 1 number 13 that shows the two electrical wires are placed to create electromagnetic scalar waves nullification and induction with the water in the vessel fig 1 number 12. Both electromagnetic oscillator circuits fig 1 num 4 and fig 1 number 14 are using the same electrical components to create electromagnetic waves nullification and induction of same approximate frequency to cancel each other out with the appropriate polarities of the

two electromagnetic waves being combined with the water in the vessel fig 1 number 12. Fig 1 number 11 is the bottom of the vessel that contains the water to be magnetized. Fig 1 num 15 is the prongs that connect the power supply to an appropriate outlet

Fig 5 num 1 is a resistor to provide voltage divider network, figure 5 num 2 is a resistor to provide voltage divider network, fig 5 num 3 is the npn emitter resistor to provide voltage to npn transistor. Figure 5 num 4 is a npn transistor to create the oscillations in the circuit board, figure 5 num 7 is a capacitor to create the oscillations in the circuit board, figure 5 num 8 is a capacitor to create oscillations in the circuit board, figure 5 num 5 is a inductor to create oscillation frequency in the circuit board, figure 5 num 9 is a resistor to develop voltage in the circuit board, figure 5 num 10 is the hole in the circuit board for the emitter leg of the transistor to be place through, figure 5 num 11 is the hole that the base of the transistor leg to be placed though, figure 5 num 12 is the hole that the collector of the transistor leg is to be placed though. Figure 5 num 13 is a circuit board that supports the electronic components.

Fig 7 num 1 is a power supply that provides direct current voltage to the two oscillator boards, the fig 7 num 1 has a alternate current input voltage that is provided externally to the invention, fig 7 num 1 is also an on off virtual switch by disconnection and reconnection from a appropriate socket, fig 7 num 2 is the positive voltage wiring to the circuit board, fig 7 num 3 is the negative voltage wiring to the circuit board, figure 7 num 4 is the common jumper point that connects the positive voltage from 1<sup>st</sup> oscillator board to the 2<sup>nd</sup> oscillator board, fig 7 num 5 is the common jumper point that connects the negative voltage from the 1<sup>st</sup> oscillator board to the 2<sup>nd</sup> oscillator board, fig 7 num 9 is the 1<sup>st</sup> oscillator board, fig 7 num 8 is the 2<sup>nd</sup> oscillator board, fig 7 num 7 is the termination for the jumper wire providing the positive voltage to the 2<sup>nd</sup> circuit board, fig 7 num 6 is the termination of the jumper wire providing the negative voltage to the 2<sup>nd</sup> circuit board, fig 7 num 12 is the positive voltage jumper for the 2<sup>nd</sup> circuit board, fig 7 num 11 is the negative voltage jumper for the 2<sup>nd</sup> circuit board.

Fig 9 num 1 is a battery that provides electrical voltage to the connecting cap and wire. Fig 9 num 2 is a connectable voltage cap that connects the inner wiring loop to the battery, this is also a virtual switch, by pulling the cap off the electrical wiring loses voltage and current flow, and the battery no longer has a load on the electrical circuit and keeps the remaining power in the battery. Fig 9 num 3 is the conducting wiring that will create a electromagnetic field across the wire, fig 9 num 3 also has a electrical nonconductive insulator to isolate the electrical voltage from the water that is to be enhanced. Fig 9 num 4 is the vessel that will contain the water to be enhanced, and fig 9 num 4 will also be the transport means to move the water to the biology to be enhanced. Fig 9 num 3 is the leading voltage wire loop from the power source, fig 9 num 5 is the return wire loop to the battery power source, this wire is looped inside the vessel that contains the water to be enhanced, also this loop being in proximity to angles for incidence will create electromagnetic scalar waves by the appropriate electromagnetic waves canceling each other out with a electromagnetic wave nullification process.

Fig 11 num 1 is a power supply that takes an AC voltage input and provides electrical voltage to the electrical wiring. Fig 11 num 2 lead wiring to the vessel that contains water to be enhanced, figure 11 num 3 is the return wiring from the vessel that contains water to be enhanced. Fig 11 num 4 is the vessel that will support the water to be enhanced, and the transport means for moving the water to the biology to be enhanced. Fig 11 num 5 is showing the lead and return wiring that is looped inside the vessel that contains the water to be enhanced; also this loop being in proximity to each sides of the same wire will create angels of incidence which will create electromagnetic scalar wave by the appropriate electromagnetic waves interference that will cancel each other out with electromagnetic voltage nullification process.

Fig 13 num 1 is a means for supplying electrical voltages to the vessel that contains water to be enhanced. Fig 13 num 2 is a hole that provides a means for the electrical conducting wiring to have access to the containment of the water to be

magnetized. Fig 13 num 4 is a means to supply water to a pump to distribute enhanced water to plant biology. Fig 13 num 5 is a means to provide power to the pump to provide a means to distribute water to plant biology. Fig 13 num 6 is a pump that provides pressure to move water through a pipe or means to flow water in an enclosed body. Fig 13 num 7 is a pipe transport to distribute of the enhanced water to be distributed on plant biology. Fig 13 num 8 this figure represents a sprinkler head that is commonly used to distribute water on a location that has plant biology to be enhanced.

Fig 15 num 1 is a shelf to provide support for the electrical wiring and electrical and electronic components and bottled water to be enhanced. Fig 15 num 2 is a bottle that contains water to be enhanced. Fig 15 num 3 is a flat surface to support the water bottle. Fig 15 num 4 is an electrical wiring that comprises an electrical conductive wire and a non conducting electrical insulator. Fig 15 num 15 is an electrical wiring that comprises an electrical conductive wire and a non conducting electrical insulator. Fig 15 num 5 is a electrical conductive wire and a non conducting electrical insulator. Fig 15 num 6 is an electrical wiring that comprises a electrical conductive wire and a non conducting electrical insulator. Fig 15 num 7 is the bottle cap that the water bottle has. Fig 15 num 8 is showing the electrical loop that is present around the water bottle, and the electrical loop is the wiring that is extended from the oscillator fig 17 num 3. Fig 15 num 9 is showing the electrical loop that is from the oscillator fig 17 num 4. Fig 15 num 11 is the hole that the electrical wiring goes through to the oscillator located on fig 17 num 3. Fig 15 num 12 is the hole that the electrical wiring goes through to the oscillator on fig 17 num 3. Fig 15 num 13 is the hole that the electrical wiring goes through to the oscillator on fig 17 num 4. Fig 15 num 14 is the hole that the electrical wiring goes through to the oscillator on fig 17 num 4. Fig 15 num 16 is the angle of incidence that the electrical loops fig 15 num 9 and fig 15 num 8 together that create the electromagnetic scalar waves that will be created and the water that is in the bottle fig 15 num 2 to be enhanced.



Fig 17 num 1 is the power source for the power supply. Fig 17 num 2 is the electrical power supply for the oscillator. Fig 17 num 3 is the 1<sup>st</sup> oscillator to create electromagnetic waves. Fig 17 num 4 is the 2<sup>nd</sup> oscillator to create electromagnetic waves. Fig 17 num 25 is the wiring from the oscillator to the cable harness. Fig 17 num 24 is the electrical harness that will transport the electromagnetic waves to the water to be enhanced. Fig 17 num 23 is a shelf to provide support for the water bottles Fig 17 num 20 and Fig 17 num 18. Fig 17 num 20 is a representation of a 2½ gallon style water container. Fig 17 num 18 is a representation of a 2½ gallon style water container. Fig 17 num 22 is a shelf that will support the water enhancement structure. Fig 17 num 22 is a shelf that will support the water enhancement structure. Fig 17 num 15 is a 1 gallon style water container. Fig 17 num 16 is a 1 gallon style water container. Fig 17 num 15 is a 1 gallon style water container. Fig 17 num 14 is a shelf to provide support for the water enhancement structure. Fig 17 num 12 is a self service size water container; fig 17 num 11 is a self service size water container. Fig 17 num 9 is a service size water container. Fig 17 number 8 is a self service size water container. Fig 17 num 6 is the wiring that is the 1<sup>st</sup> oscillator electromagnetic energy. Fig 17 number 7 is the wiring that is the 2<sup>nd</sup> oscillator electromagnetic energy. Fig 17 num 5 is part of the support structure that supports the shelves and electrical and electronic components.

Fig 19 is the current wire cage being used to create electromagnetic scalar waves induction in the water vessel. Fig 1 num 12 and Fig 19 num 1 is lead wire from the 1<sup>st</sup> oscillator fig 1 num 7 and Fig 19 num 2 is the return wire from the 1<sup>st</sup> oscillator fig 1 num 8. Fig19 num 3 is the lead wire from the 2<sup>nd</sup> oscillator Fig 1 num 14.

### Alternative Method of Preferred Embodiment

An alternative method of creating magnetized water is to separate the water to be magnetized and the electrical circuit to be kept separate from the water vessel. A support means to support the water vessel, an electrical wiring outside the water

vessel to induce electromagnetic scalar waves inside the water, an oscillator circuit and power source connected with the support structure of the water bottle

Fig 15 num 1 is a shelf to provide support for the water bottle containing water to be enhanced. Fig 15 num2 is the water bottle containing water to be enhanced. Fig 15 num 3 is the surface of the shelf that supports the water bottle water to be enhanced. Fig 15 num 4 is part of the 1<sup>st</sup> oscillator loop. Fig 15 num 15 is the other part of the wire loop from the 1<sup>st</sup> oscillator loop. Fig 17 num 1 is the appropriate power to be supplied to the Fig 17 num 2 power supply. Fig 17 num 2 is the power supply that provides power to the oscillator Fig 17 num 3 and Fig 18 num 4. Fig 17 num 25 is the cable connection that connects the oscillators fig 17 num 3 and fig 17 num 4 to the electrical cabling and harness to all the appropriate water vessels to be enhanced. Fig 17 num 23 is the shelf to provide support to the water vessels Fig 17 num 18 and Fig 17 num 20. Fig 17 num 19 is a shelving surface that runs to bottom providing support to the structure and front and back surfaces for running electrical wiring and cabling. Fig 17 num 22 is a shelf that provides support to the water vessels Fig 17 num 15, Fig 17 num 16, Fig 17 num 17. Fig 17 num 14 is a shelf that provides support to the water vessels Fig 17 num 8, Fig 17 num 9, Fig 17 num 10, Fig 17 num 12, and Fig 17 num 13. Fig 17 num 5 is a portion of the wiring cable that is separated from the main cable Fig 17 num 24, this supplies the two oscillator sources of electromagnetic frequencies to each of the water vessels to be enhanced along that shelf. Fig 17 num 6 is the 1<sup>st</sup> oscillator wiring loop. Fig 17 num 7 is the 2<sup>nd</sup> oscillator wiring loop to the vessels that will contain water to be enhanced.

An alternative method of created magnetized water is to have a separate power source to provide power to the electrical circuits and means to power the invention, and vessel that contains a means to supply water to be magnetized, and a pump system to deliver this water to supply water to plants individual or commercial uses.

Fig 13 num 1 is the electrical power that will provide power to the wiring inside the water vessel Fig 13 num 3. Fig 13 num 3 is the water vessel that will contain the water that will be enhanced. Fig 13 num 4 is the water pipe that will transport the enhanced water contained to the water pump fig 13 num 6. Fig 13 num 5 is the wiring that will provide power to the water pump Fig 13 num 6, Figure 13 number 6 is the water pump that will provide sufficient water pressure to distribute enhanced water to the biological plants in the area. Fig 13 num 8 is a symbol for a sprinkler head to distribute water to the biological plants.

An alternative method of created magnetized water is to use a battery power source to supply voltage to the wiring and a single wire loop inserted in the vessel containing water to be enhanced, into the water to the exposed to electromagnetic waves at angles to create scalar waves inside the water, vessel used to transport the water to be used

Fig 9 num 1 is the battery power source. Fig 9 num 2 is the cap that connects the batter power to the electrical wiring; fig 9 num 6 is also a virtual switch that when the cap is disconnected from the battery power source the voltage is separated from the electrical wiring. Fig 9 num 3 is the lead wire providing positive voltage from the battery power source. Fig 9 num 5 is the return wire providing negative voltage from the battery source. Fig 9 num 7 is the angle of incidence that creates the electromagnetic scalar waves from the electromagnetic scalar waves created when both sides of the wiring are inside the water vessel and current is running though the wiring.

An alternative method of creation of enhanced water is to use a plug in external power source Fig 11 num 6 to the power supply Fig 11 num 1. Fig 11 num 1 is to provide voltage to the wire loop. Fig 11 num 3 is the lead wire containing positive voltage from the power supply to the wire loop. Fig 11 num 2 is the return wire containing negative voltage from the power supply to the wire loop. Fig 11 num 4 is the vessel that will contain the water to be enhanced. Fig 11 num 7 is the same

vessel that will provide an ability to transport the enhanced water to the biology to be enhanced. Fig 11 num 5 is the angle of incidence that will be created when the wire loop is placed inside the water vessel, this angle of incidence will be used to create electromagnetic waves are nullified and created into electromagnetic scalar waves.

An alternative method of creation of enhanced water is to use a means to supply ac current along a electrical conductive wire, an electrical insulator, an means to create electromagnetic scalar waves by a single loop inside the water supply, a means to supply water to biological organism.

An alternative method of creation of enhanced water is to use a battery power source attached to the water vessel, an electronic assembly containing oscillator circuit, a means of turning on the electrical components, wiring running along the inside the water vessel containing the water to be enhanced, water vessel to fit inside a refrigerator unit to keep the enhanced water cooled.

### **Detailed Description of the Drawings**

Fig 1 num (1) is a power supply that takes provided external power and converts that power to a suitable electrical voltage to drive the oscillator Fig 1 number (4). Fig 1 num (5) and Fig 1 num (6) are the jumpers that provide power from the 1<sup>st</sup> circuit board to the 2<sup>nd</sup> oscillator circuit board that will create the electromagnetic induction along the insulated wiring. Fig 1 number (7) and fig 1 num (8) and fig 1 num (9) and fig 1 num (10), are the electrical loops to provide electromagnetic fields to create induction to the water provided in fig 1 num (12). Fig 1 num (7) and num (8) are placed at a incidence angle with electrical loops fig 1 num (9) and num (10) to induce electromagnetic scalar waves inside the provided vessel fig 1 num (12)

Fig 3 num (1) r1 and Fig 3 num (2) r2 are a voltage dividing resistor network to supply voltage to the oscillator circuit. Fig 3 num (3) r3 is a emitter transistor resistor voltage to provide voltage to the emitter of the npn transistor. Fig 3 num (4) is the npn transistor that provides the change in voltage that will create the oscillator tank frequency. Fig 3 num (5) l1 is the electrical inductor that helps create the frequency tank circuit. Fig 3 num (6) w1 is the external wiring that is part of the electrical oscillator tank frequency that provides the electromagnetic induction with the water that is provided in the vessel that is shown as fig 1 num (12). Fig 3 num (7) c2 is a capacitor that helps create the electrical oscillator tank frequency. Fig 3 num (8) c1 is a capacitor that helps create the electronic oscillator tanks frequency. Fig 3 num (9) r4 is a resistor that helps create a voltage across the tank circuit to the electrically negative voltage provided from the power supply fig 1 num (1). Fig 3 num (10) is a wire to provide positive voltage to the oscillator, Fig 3 num (11) is a wire to provide negative voltage to the oscillator, fig 3 num (10) is a electrical conductive wiring that provides positive voltage from the power supply fig 1 num (1), fig 3 num (11) is a electrical conductive wiring that provides negative voltage from the power supply, figure 3 num (10) also has a non conductive electrical insulation that provides insulation across the electrical wiring, fig 3 num (10) also has a non conductive electrical insulation that provides insulation across the electrical wiring

Fig 3 num (6) w1 is the electrical conduction wiring that is surrounded with a non conducting electrical insulator. This external wire is part of the oscillator tank circuit comprising and l1, c1, c2, components this tank circuit provides the electromagnetic fields along the wiring fig 3 num (6) w1 to the vessel fig 1 num (12) that contains the water to be magnetized. The two electrical loops fig 1 num (7) and num (8) plus fig 1 num (9) and num (10) are shown with a angle of incidence fig 1 num (13) that shows the two electrical wires are placed to create electromagnetic scalar waves induction with the water in the vessel fig 1 num (12). Both electromagnetic oscillator circuits fig 1 num (4) and fig 1 num (14) are using the same electronic value components to create electromagnetic waves of same relative frequency to cancel each other out with the appropriate polarities of the two

electromagnetic waves being inducted with the water in the vessel fig 1 num (12). Fig 1 num (11) is the bottom of the vessel that contains the water to be magnetized. Fig 1 num (15) is the prongs that connect the power supply to an appropriate outlet

Figure 5 num (1) is a resistor to provide voltage divider network, figure 5 num (2) is a resistor to provide voltage divider network, figure 5 num (3) is the npn emitter resistor to provide voltage to npn transistor. Figure 5 num (4) is a npn transistor to create the oscillations on the circuit board and external wiring, figure 5 num (7) is a capacitor to create the oscillations in the circuit board, figure 5 num (8) is a capacitor to create oscillations in the circuit board, figure 5 num (5) is an inductor to create oscillation frequency in the circuit board, figure 5 num (9) is a resistor to develop voltage in the circuit board, figure 5 num (10) is the hole in the circuit board for the emitter leg of the transistor to be placed through, figure 5 num (11) is the hole that the base of the transistor leg is to be placed through, figure 5 num (12) is the hole that the collector of the transistor leg is to be placed through. Figure 5 num (13) is a circuit board backing that provides a means to support the electronic components.

Figure 7 num (1) is a power supply that provides direct current voltage to the two oscillator boards, the figure 7 num (15) has an alternate current input voltage that is provided externally to the power supply, figure 7 num (1) is also an on off virtual switch by disconnection connection from a wall socket or any another means of putting the power supply into a compatible voltage source, fig (7) num 2 is the positive voltage wiring to the circuit board, figure 7 num (3) is the negative voltage wiring to the circuit board, figure 7 num (4) is the common jumper point that connects the positive voltage from 1<sup>st</sup> oscillator board to the 2<sup>nd</sup> oscillator board, figure 7 num (5) is the common jumper point that connects the negative voltage from the 1<sup>st</sup> oscillator board to the 2<sup>nd</sup> oscillator board, figure 7 num (9) is the 1<sup>st</sup> oscillator board, figure 7 number 8 is the 2<sup>nd</sup> oscillator board, figure 7 num (7) is the termination for the jumper wire providing the positive voltage to the 2<sup>nd</sup> circuit board, figure 7 num (6) is the termination of the jumper wire providing the negative voltage to the 2<sup>nd</sup> circuit board, figure 7 num (10) is the positive voltage jumper for the 2<sup>nd</sup>